# VIP-Length Adjustment > VLE <

## **User Manual**

This safety instruction/declaration has to be kept on file for the whole lifetime of the product.

#### **Translation of the Original instructions**

This assembly instruction is valid in addition to the safety instructions for RUD Sling chains RUD-No. 7101649.



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## **B** RUD

RUD-Art.-Nr.: 7902394-EN / 02.015

### EG-Einbauerklärung

entsprechend der EG-Maschinenrichtlinie 2006/42/EG. Anhang II B und ihren Änderungen

RUD Ketten Rieger & Dietz GmbH u. Co. KG Friedensinsel 73432 Aalen

Hiermit erklären wir, dass die nachfolgend bezeichnete unvollständige Maschine den grundlegenden Anforderungen der Mäschinenrichtlinie 2006/42/EG (Anhang 1) entspricht. Die nachfolgend bezeichnete unvollständige Maschine darf, in der gelieferten Ausführung erst dann in Betrieb genommen werden, wenn festgestellt wurde, dass die Maschine, in die diese unvollständige Maschine eingebaut werden soll, den Anforderungen der EG-Maschinerrichtlinie 2006/42/EG entspricht.

Produktbezeichnung:	Längeneinstellung	
Folgende harmonisierten No	ormen wurden angewandt: EN 12100 : 2011-03	EN 1677-1 : 2009-03
Folgende nationalen Norme	n und technische Spezifikatione BGR 500. KAP2.8 : 2008-04	n wurden außerdem angewandt:
	rur unvollständigen Maschine auf begründetes Verlangen	e nach Anhang VII Teil B in geeigneter Form übermittelt.
Für die Zusammenstellung d	der Konformitätsdokumentation Reinhard Smetz, RUD Kett	
Aalen, den 27.06.2014	DrIng. Arne Kriegsmann,(	

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#### EC-Mounting declaration

According to the EC-Machinery Directive 2006/42/EC, annex II B and amendments

Manufacturer:

RUD Ketten Rieger & Dietz GmbH u. Co. KG Friedensinsel 73432 Aalen

We hereby declare that the following incomplete machines correspond to the basic requirements of the Machinery Directive 2006/42/EC (annex 1). The following incomplete machine, in the delivered machine, may only be put into operation when the machine in which the incomplete machine shall be assembled that here tested according to the

requirements of the EC-Mac	chinery Directive 2006/42/EC	is been tested according to the		
Product name:	Length adjustment			
The following harmonized no	orms were applied:			
	EN 12100 : 2011-03	EN 1677-1 : 2009-03		
The following national norms	and technical specifications w	ere applied:		
-	BGR 500, KAP2.8 : 2008-04			
	ut the incomplete machine a be handed over in a suitable			
Authorized person for the co	nfiguration of the declaration de Reinhard Smetz, RUD Kett			
Aalen, den 27.06.2014	<u>DrIng. Arne Kriegsmann,(</u> Name, function and signature			



Please read user instruction carefully before initial operation of VLE. Make sure to understand all volumes.

Non-observance of this user's manual can lead to serious physical injury and property damage and eliminates warranty.

## 1 Safety instructions



#### **ATTENTION**

Incorrect usage as well as wrong assembled or damaged components for length adjustment can lead to injuries of persons and property damage when loads fall down.

Control every component carefully before each usage.

- Consider extreme circumstances or shock loads when selecting the used components.
- Sling chains (for lifting) with VIP length adjustments should not be turned under load because components could either become loose or untwine.
- VIP-Length Adjustments must only be used by competent and trained persons, considering the BGR 500 standard / DGUV 100-500, chapter 2.8, and outside Germany acc. to the country specific requirements.

## 2 Intended use

VIP length adjustment devices (VLE) must only be used with chain slings.

- Assembled into chain slings they allow an exact length adjustment.
- VLE can be assembled to VIP chain diameters 20 mm, 22 mm and 28 mm.



#### HINT

VLE is not bound to be used with lashing chains.

VIP-Length Adjustments (VLE) must only be used in the here described way.

## 3 Installation and user information

#### 3.1 General information

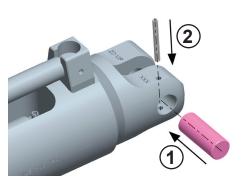
 Capability of temperature usage: When used in temperatures higher than 200°C the WLL of VIP-Length Adjustments must be reduced as follows: -40°C up to 200°C ==> no reduction 200° up to 300°C ==> minus 10 % 300° up to 380°C ==> minus 40 % Temperatures above 380°C are prohibited!

 VIP-Length Adjustments must not be used together with aggressive chemicals, acids and vapours.

### 3.2 Hints for the assembly

Basically essential:

- Assemble the roller pin for securing of the load pin into the tensioning elements resp. into the length adjustment in such a way that the groove can be seen from the outside (Pic. 1)
- · Use retaining pins only once.
- Assemble only connecting bolts with H1-10 embossment.
- · Use only original RUD spare parts.
- Check finally the correct assembly (see chapter 4 Inspection criteria).



Pic. 1: Assembly

#### 3.3 Hints for the usage

#### 3.3.1 General information

 Control frequently and before each operation the whole components for the length adjustment in regard of ongoing ability, strong corrosion, wear, deformation etc. (see chapter 4 Inspection criteria).



## **ATTENTION**

Incorrect usage as well as wrong assembled or damaged components for length adjustment can lead to injuries of persons and property damage when loads fall down.

Control every component carefully before each usage.

- Pay always attention to the position of the tensioner.
- Make sure that the tensioner does not get in touch with the vehicle, edges or other obstacles.

- The spindles are equipped with anti-turn-out devices. Spindles must only be turned out to the arrester and without brute force.
- Use toggle always in the original serial version (without extension)
- Watch always suspended or lashed loads.
- · Leave hazardous area whenever possible.
- For all lifting means read the RUD sling chain and safety instructions.

## 3.3.2 Usage with sling chains (for lifting or fine adjustment)

 VIP-Llength adjustment devices must only be used for lifting actions in combination with sling chains for vernier adjustment. Turn VIP length adjustment before lifting into the shortest possible position (Lclosed) to allow lengthening of the chain strand.



#### HINT

Length adjustment is only possible when chain is not loaded. When chain is loaded only very small loads can be adjusted or lowered. Turning while loaded should be avoided.

#### 3.4 Hints for the regularly testing

Check by an experienced competent person in time periods depending on the frequency at least 1x per year, the ongoing usage of the components (see chapter 4 Inspection criteria).

Depending on the conditions of use, e.g. increased wear or corrosion, it might be necessary that inspections must to be made in shorter time intervals than one year.

### 3.5 Regularly lubrication

To ensure ability of function, the threaded spindle should be lubricated regularly with multi-purpose-grease.

## 4 Inspection criteria

Check and control the following points before each initial operation, in frequent time intervals, after assembly and special incidents:

- Completeness of the VIP-Length Adjustment
- · Readable size and manufacturer sign
- mechanical damage like strong notches, especially in areas where tensile stress occurs
- Reduction of cross section caused by wear
  10 %, especially at the clevis connection
- · Cracks or other damage
- Smooth running of the threads

## 5 Hints for repairing

- Repairing must only be done by a competent person which has the knowledge and technical skills.
- Use only original RUD spare parts and register any made repairing in the lifting means file card of the complete chain sling card file (of the complete lifting mean) or use the RUD-ID-System<sup>®</sup>.

RUD components are designed acc. to DIN EN 818 and 1677 for a dynamical loading of 20.000 load cycles. Employers insurance association (German BG) recommends: At high dynamic loading with high load cycle numbers (continuous operation), the bearing stress acc. to load factor group 1Bm (M3 acc. DIN EN 818-7) must be reduced.

In doubt or in misconception please note that the German version of this document is decisive. In doubt or in misconception please note that the German version of this document is decisive.

Chain Ø VIP	Туре	WLL Lifting chain [kg] Lifting	A [mm]	T <sub>min</sub> [mm]	weight [kg/pc.]	RefNo.
20	VLE-20	16,000	140	~ 363	18.1	7997322
22	VLE-22	20,000	140	~ 363	18.3	7994668
28	VLE-28	31,500	172	~ 478	44	7900772

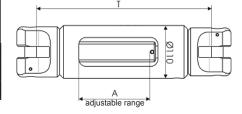


Table 1: Dimensioning VLE Technische Änderungen vorbehalten

Pic. 2: VLE